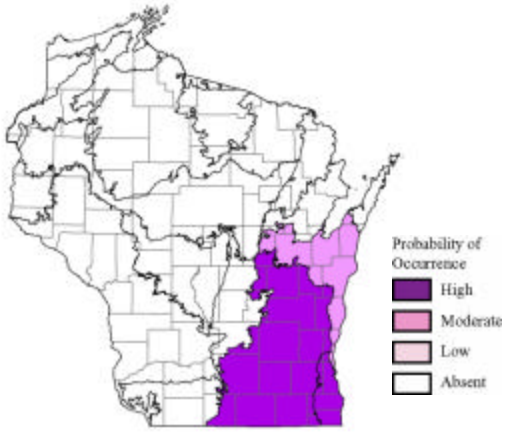
Butler's Garter Snake (*Thamnophis butleri*)

Species Assessment Scores*

State rarity:	4
State threats:	4
State population trend:	4
Global abundance:	2
Global distribution:	5
Global threats:	4
Global population trend:	4
Mean Risk Score:	3.9
Area of importance:	4

* Please see the Description of Vertebrate Species Summaries (Section 3.1.1) for definitions of criteria and scores.



Ecological Landscape Associations
Please note that this is not a range map. Shading does not imply that the species is present throughout the Landscape, but represents the probability that the species occurs somewhere in the Landscape.

Landscape -community Combinations of Highest Ecological Priority

Ecological Landscape	Community
Southeast Glacial Plains	Calcareous fen
Southeast Glacial Plains	Dry-mesic prairie
Southeast Glacial Plains	Emergent marsh
Southeast Glacial Plains	Floodplain forest
Southeast Glacial Plains	Mesic prairie
Southeast Glacial Plains	Northern sedge meadow
Southeast Glacial Plains	Shrub-carr
Southeast Glacial Plains	Southern sedge meadow
Southeast Glacial Plains	Wet prairie
Southeast Glacial Plains	Wet-mesic prairie
Southern Lake Michigan Coastal	Calcareous fen
Southern Lake Michigan Coastal	Emergent marsh
Southern Lake Michigan Coastal	Mesic prairie
Southern Lake Michigan Coastal	Shrub-carr
Southern Lake Michigan Coastal	Southern sedge meadow
Southern Lake Michigan Coastal	Wet prairie
Southern Lake Michigan Coastal	Wet-mesic prairie

Threats and Issues

- Agriculture and urban sprawl has significantly reduced available upland habitat and has fragmented most remaining Butler's garter snake populations.
- Habitat loss and degradation from recreational development, wetland draining, encroachment, and altered hydrology have negatively affected this species.
- Natural succession is reducing suitable open, upland habitat needed by this species.
- Non-native invasive plants such as reed canary grass and monotypic cattails have significantly decreased habitat suitability.

- Reed canary grass limits or precludes burrowing crayfish, a critical species that provides overwintering habitat for Butler's garter snake.
- Increased run-off results in wetland sedimentation that often alters and degrades native plant communities, favoring monotypic stands of nuisance or exotic species.
- Roads have fragmented habitats and resulted in altered hydrology, negatively impacting this species.
- This species interbreeds with the plains gartersnake. A hybrid zone has significantly reduced the actual range of true Butler's.

Priority Conservation Actions

- Protect suitable habitat on signficant publicly and privately owned sites to protect remaining habitat.
- Manage habitat connectivity through preservation of connecting corridors.
- Restore habitats by reversing natural succession and reducing densities of nuisance or exotic plants such as reed canary grass.
- Update conservation strategy as guidance for incidental take.
- Evaluate Overlay Zoning as a means of protecting Butler's habitat through municipalities.
- Major strides in policy and education are needed to adequately represent and consider wildlife habitat in zoning and planning decisions.
- Research is needed to determine the role and use of wetland habitats during the snake's active season, to further analyze genetic issues related to Butler's hybrids and plains gartersnakes, and to conduct population viability analyses on representative populations (and obtain information to reduce uncertainty in population parameters for this analysis).
- Establish a long term monitoring program to track trends in Butler's garter snake populations.
- Implement education and landowner contact program to help protect the snake on private lands and build support for the overall conservation strategy for this species.
- There is a need to work proactively with various conservation organizations to permanently protect suitable habitat on significant conservation sites for this species.